

WHAT IS CLAIMED IS:

1. A system for providing a virtual communication space,  
corresponding to sensed information of the real world, between users  
5 that have sensed information that is shared in the real world,  
comprising:

a communication medium providing a communication channel  
that makes communication in a limited space of the real world possible;

10 a user terminal comprising a communication channel  
identification information sensing means for sensing identification  
information of a communication channel that has been assigned in that  
limited space of the real world; a channel login means for selecting a  
communication channel based on the communication channel  
15 identification information; a communication means; a means for  
inputting information; and a communication application for sending  
and receiving information via the communication channel;

20 a virtual communication space providing means comprising a  
communication means; a means for grouping user terminals by  
assigning a communication channel to the user terminals present in the  
limited space of the real world; a communication channel  
identification information transmission means for transmitting  
25 identification information of the assigned communication channel to the  
user terminals; a user-sent information storage means for storing  
information that has been sent by a user terminal; and a user-sent  
information providing means for providing information stored in the  
user-sent information storage means to the user terminal logged into  
the communication channel.

2. The system for providing a virtual communication space  
30 according to claim 1, wherein the communication channel login means  
comprises a logout means, and the user terminal logs out of the  
communication channel to which it is logged in by retiring from the  
virtual communication space or by logging into a communication  
channel that is assigned to another virtual communication space.

35 3. The system for providing a virtual communication space  
according to claim 1, wherein the user-sent information providing

means provides user-sent information by posting information on an electronic bulletin board that is maintained for a certain period of time.

4. The system for providing a virtual communication space according to claim 1, wherein the user-sent information providing means provides user-sent information by providing all user-sent information that has been accumulated as history of a predetermined period of time prior to login to user terminals that have newly logged into the communication channel, and thereafter immediately exchanging user-sent information among user terminals that are logged in as chat.

5. The system for providing a virtual communication space according to claim 1,

further comprising a supervisor terminal outside the limited space of the real world;

wherein the communication means comprises an external communication means for external communication with the supervisor terminal; and

wherein the supervisor terminal comprises a channel login means for logging into the communication channel on which communication has become possible with the external communication means, and a communication application for sending and receiving information via the communication channel, wherein information can be sent and received among user terminals in the limited space of the world via the virtual communication space providing means.

6. The system for providing a virtual communication space according to claim 5,

wherein the supervisor terminal further comprises a user-sent information collecting means for collecting the sent records of user-sent information that has been stored by the user-sent information storage means, and a user-sent information database accumulating the user-sent information that has been collected, and

the supervisor terminal further comprises a keyword classification means for classifying by keyword the content of the user-sent information in the user-sent information database, a

user-sent information analyzing means for analyzing statistical qualities of the user-sent information that has been classified by keyword, and a direct electronic mail sending means for sending information that is associated with the keyword classification to the user terminal that has sent the user-sent information that has been classified by keyword.

7. The system for providing a virtual communication space according to claim 1,

wherein the communication channel identification information transmission means includes a communication channel identification information notifying means for notifying the assigned transmission channel identification information wirelessly; and

wherein the communication channel identification information sensing means is a receiving means sensing communication channel identification information that has been notified wirelessly from the communication channel identification information notifying means.

8. The system for providing a virtual communication space according to claim 7,

further comprising a supervisor terminal outside the limited space of the real world;

wherein the communication means comprises an external communication means for external communication with the supervisor terminal; and

wherein the supervisor terminal comprises a channel login means for logging into the communication channel on which communication has become possible with the external communication means, and a communication application for sending and receiving information via the communication channel, wherein information can be sent and received among user terminals in the limited space of the world via the virtual communication space providing means.

9. The system for providing a virtual communication space according to claim 8,

wherein the supervisor terminal further comprises a user-sent information collecting means for collecting the sent records of user-sent

information that has been stored by the user-sent information storage means, and a user-sent information database accumulating the user-sent information that has been collected, and

the supervisor terminal further comprises a keyword  
5 classification means for classifying by keyword the content of the user-sent information in the user-sent information database, a user-sent information analyzing means for analyzing statistical qualities of the user-sent information that has been classified by keyword, and a direct electronic mail sending means for sending  
10 information that is associated with the keyword classification to the user terminal that has sent the user-sent information that has been classified by keyword.

10. The system for providing a virtual communication space  
15 according to claim 1,

wherein the communication channel identification information transmission means is a communication channel identification information display means for displaying the assigned communication channel identification information; and

20 wherein the communication channel identification information sensing means is a reading means for reading the communication channel identification information displayed by the communication channel identification information display means.

25 11. The system for providing a virtual communication space according to claim 10,

further comprising a supervisor terminal outside the limited space of the real world;

30 wherein the communication means comprises an external communication means for external communication with the supervisor terminal; and

35 wherein the supervisor terminal comprises a channel login means for logging into the communication channel on which communication has become possible with the external communication means, and a communication application for sending and receiving information via the communication channel, wherein information can be sent and received among user terminals in the limited space of the

world via the virtual communication space providing means.

12. The system for providing a virtual communication space according to claim 11,

5 wherein the supervisor terminal further comprises a user-sent information collecting means for collecting the sent records of user-sent information that has been stored by the user-sent information storage means, and a user-sent information database accumulating the user-sent information that has been collected, and

10 the supervisor terminal further comprises a keyword classification means for classifying by keyword the content of the user-sent information in the user-sent information database, a user-sent information analyzing means for analyzing statistical qualities of the user-sent information that has been classified by keyword, and a direct electronic mail sending means for sending  
15 information that is associated with the keyword classification to the user terminal that has sent the user-sent information that has been classified by keyword.

20 13. The system for providing a virtual communication space according to claim 1,

wherein the user terminal further comprises a position detecting means for detecting position information, and the virtual communication space providing means further comprises a position /  
25 communication channel correspondence table showing the correspondence between position information of the real world and communication channel identification information assigned to places indicated by that position information; and

30 wherein the communication channel identification information sensing means is a means for notifying the detected position information to the virtual communication space providing means, and sensing the communication channel identification information that is returned based on the position / communication channel correspondence table.

35 14. The system for providing a virtual communication space according to claim 13, wherein the communication channel login means

comprises a logout means, and the user terminal logs out of the communication channel to which it is logged in by retiring from the virtual communication space or by logging into a communication channel that is assigned to another virtual communication space.

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15. The system for providing a virtual communication space according to claim 13, wherein the user-sent information providing means provides user-sent information by posting information on an electronic bulletin board that is maintained for a certain period of time.

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16. The system for providing a virtual communication space according to claim 13, wherein the user-sent information providing means provides user-sent information by providing all user-sent information that has been accumulated as history of a predetermined period of time prior to login to user terminals that have newly logged into the communication channel, and thereafter immediately exchanging user-sent information among user terminals that are logged in as chat.

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17. The system for providing a virtual communication space according to claim 13,

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further comprising a supervisor terminal outside the limited space of the real world;

wherein the communication means comprises an external communication means for external communication with the supervisor terminal; and

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wherein the supervisor terminal comprises a channel login means for logging into the communication channel on which communication has become possible with the external communication means, and a communication application for sending and receiving information via the communication channel, wherein information can be sent and received among user terminals in the limited space of the world via the virtual communication space providing means.

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18. The system for providing a virtual communication space according to claim 17,

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wherein the supervisor terminal further comprises a user-sent

information collecting means for collecting the sent records of user-sent information that has been stored by the user-sent information storage means, and a user-sent information database accumulating the user-sent information that has been collected, and

5 the supervisor terminal further comprises a keyword classification means for classifying by keyword the content of the user-sent information in the user-sent information database, a user-sent information analyzing means for analyzing statistical qualities of the user-sent information that has been classified by  
10 keyword, and a direct electronic mail sending means for sending information that is associated with the keyword classification to the user terminal that has sent the user-sent information that has been classified by keyword.

15 19. A computer-readable storage medium storing a program for realizing a system for providing a virtual communication space between users that have sensed information that is shared in the real world, the storage medium comprising:

20 a communication control program for controlling a communication means for providing a communication channel that makes communication in a limited space of the real world possible;

a user terminal processing program comprising a processing operation of sensing identification information of communication channels that have been provided by the communication means; a  
25 channel login processing operation of selecting communication channels based on the communication channel identification information; and a communication application for sending and receiving information via the communication channel;

30 a virtual communication space providing processing program comprising a processing operation of logging into user terminals by a assigning communication channel to user terminals present in the limited space of the real world; a communication channel identification information transmission processing operation of transmitting identification information of an assigned communication  
35 channel to a user terminal; a user-sent information storage processing operation of storing information that has been sent by a user terminal via the communication channel; and a user-sent information providing

processing operation of providing information stored in the user-sent information storage processing operation to the user terminal accessible via the communication channel.

- 5 20. The storage medium according to claim 12,  
wherein the storage medium further comprises a processing  
program for a supervisor terminal that is outside the limited space of  
the real world;  
wherein the communication control program further includes an  
10 external communication control program controlling external  
communication with the processing program for the supervisor  
terminal;  
wherein the processing program for the supervisor terminal  
comprises a channel login processing operation of logging into the  
15 communication channel with which the external communication  
program has enabled communication, and a communication application  
for sending and receiving information via the communication channel,  
and wherein the processing program for the supervisor terminal can  
exchange information with the processing programs for the user  
20 terminals in the limited space of the real world via the virtual  
communication space providing processing program.